

### REMARKS

Claims 26-31, 38-42, 44-47, and 49-52 are pending in this application. Claims 38, 39, 41, 47, 50 and 51 are withdrawn, claims 26 and 45 are amended, and claims 43 and 48 are cancelled without prejudice or disclaimer. Reconsideration in view of the following remarks and rejoinder of the withdrawn claims are respectfully requested.

Applicants request that finality be withdrawn because according to MPEP §706.07(a) Final Rejection, When Proper on Second Action:

Under present practice, second or any subsequent actions on the merits shall be final, except where the examiner introduces a new ground of rejection that is neither necessitated by applicant's amendment of the claims nor based on information submitted in an information disclosure statement filed during the period set forth in 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p).

However, Applicants submit that the last response filed on June 6, 2006 did not include any amendments, and therefore such finality is not necessitated by applicant's amendment of the claims nor based on information submitted in an information disclosure statement. Thus, withdrawal of the finality is requested.

If finality is not withdrawn, Applicants submit that entry of this Amendment After Final is proper because the amendment to claim 26 merely incorporates the subject matter of previously pending dependent claim 43 (now cancelled), and the amendment to claim 45 merely incorporates the subject matter of previously pending dependent claim 48 (now cancelled). Entry of this Amendment After Final, and the amendments to claims 26 and 45 is hereby requested.

**1. 35 U.S.C. §103(a)**

The Office Action rejects claims 26, 27, 29, 31, 40, 42-46, 48, 49, and 52 under 35 U.S.C. §103(a) over *Vogel et al.* (U.S. Patent No. 6,656,738, hereinafter "*Vogel*") in view of *Fite et al.* (U.S. Patent No. 5,142,143, hereinafter "*Fite*"), *van Breest Smallenburg* (U.S. Patent No. 4,477,961, hereinafter "*van Breest Smallenburg*"), as evidenced by *Adachi et al.* (U.S. Patent No. 4,381,233, hereinafter "*Adachi*"). Also, claims 28 and 30 are rejected over *Vogel*, *Fite*, *Smallenburg*, and in further view of *Helgeland* (U.S. Patent No. 3,629,781). Claims 43 and 48 have been cancelled, therefore the rejection of these claims is moot. The rejections of the remaining claims are respectfully traversed.

Applicants hereby incorporate the arguments discussed in the previously filed responses. Primarily, Applicants submit that *Vogel* fails to disclose or suggest the use of a preconcentrator tube as anything other than a preconcentrator tube for fluid testing, let alone an inhaler, as recited in claims 26, 45, and 49.

As mentioned in our Request for Reconsideration dated June 6, 2006, the Office Action also states that "[i]t is also noted that preconcentrator tube could be used separately from the device of *Vogel* to vaporize medicament and be used as an inhaler." See page 5 of the Office Action. However, *Vogel* fails to disclose or suggest any other uses of the preconcentrator tube disclosed therein. Applicants submit that one of ordinary skill in the art would not look to a preconcentrator tube containing sorbent material, as preconcentrator tubes have nothing to do with medicaments, or even flowing fluid therethrough.

In fact, one of ordinary skill in the art of preconcentrator tubes would not look to preconcentrator tubes at all for vaporizing medicaments or use as an inhaler.

Rather, preconcentrator tubes are used for capturing and accumulating chemicals rather than flowing and vaporizing fluids passing therethrough as would occur with an inhaler. For example, *Vogel* states that preconcentrator tubes are "well known in the art and correspond to a tube for accumulating chemicals and a material for sorbing (and, therefore, accumulating the chemicals), respectively." See *Vogel* column 1, lines 27-30. Yet, even though the preconcentrator tubes are well known in the art, there is no mention of any other uses of preconcentrator tubes in *Vogel* (or *Fite* for that matter).

Further, *Vogel* describes the heating element as being provided to heat the sorbent material and thereby desorb the chemicals. See *Vogel* column 1, lines 31-33. Thus, *Vogel* does not disclose or suggest the providing an inhaler or a vaporizing medicament device of any sort.

The remaining references fail to cure the deficiencies of *Vogel*. Specifically, the other cited references do not disclose or suggest using a preconcentrator tube as an inhaler or to vaporize medicament. Rather, *Fite* discloses another preconcentrator and does not disclose or suggest a method of making an inhaler or vaporizing medicaments.

*van Breest Smallenburg* discloses a measuring capillary for "measuring and regulating the viscosity of heavy oils" and also does not disclose or suggest a method of making an inhaler or vaporizing medicaments. See *van Breest Smallenburg* col. 1, lines 6-10.

*Adachi* discloses a photoelectrolyzer for sunlight collection and also does not disclose or suggest a method of making an inhaler or vaporizing medicaments.

*Helgeland* discloses a metal film resistor formed on a flat chip and encapsulated within an insulative compound by a molding process which forms a cylindrical resistor having axial leads, and also does not disclose or suggest a method of making an inhaler or vaporizing medicaments.

Thus, none of the applied references discloses or suggests an inhaler as recited in the claims, let alone a method of manufacturing a fluid vaporizing device wherein liquid flows through a fluid passage comprising the steps of: (a) forming the fluid passage in a non-cylindrical body, the fluid passage having an inlet opening and an outlet opening, wherein the fluid passage has a volumetric capacity of about  $1 \times 10^{-6}$  ml to about 1.0 ml; and (b) providing a tubular heater by forming a thin resistive film inside said fluid passage such that the film lines all of the length of the passage, wherein the fluid vaporizing device comprises an inhaler, as recited in claim 26; a method of manufacturing an aerosol generator comprising the steps of: forming a fluid passage in a body, the fluid passage having an inlet opening and an outlet opening and a transverse cross-sectional area of about  $2 \times 10^{-3}$  mm<sup>2</sup> to about  $8 \times 10^{-1}$  mm<sup>2</sup>; and forming a thin resistive film inside at least a portion of the fluid passage such that the film lines the fluid passage to provide a tubular heater, wherein the aerosol generator comprises an inhaler, as recited in claim 45; or a method of manufacturing an inhaler comprising the steps of: forming a capillary sized fluid passage in a body, the capillary sized fluid passage having an inlet opening and an outlet opening; forming a thin resistive film inside the capillary sized fluid passage such that the film lines the capillary sized fluid passage to form a tubular heater; and incorporating the body in the inhaler, wherein the tubular heater

is capable of heating liquid passing through the capillary sized passage to form an aerosol for inhalation through a portion of the inhaler, as recited in claim 49.

Additionally, the cited references also fail to disclose or suggest the combination of features of the claims because one of ordinary skill in the art would not look for a method of forming an inhaler within the unrelated fields of preconcentrator tubes (*Vogel*, and *Fite*), measuring capillaries for "measuring and regulating the viscosity of heavy oils" (*van Breest Smallenburg*), photoelectrolyzers for sunlight collection (*Adachi*), and metal film resistors (*Helgeland*) without impermissible hindsight.

Further, the Office Action's statement on page 4 (emphasis added) that "it is well known in the art to form passages or channels in a rectilinear block." However, the Office Action seems to equate the first art of measuring capillaries for regulating viscosity of heavy oils with the second unrelated art of making preconcentrator tubes, and Applicants submit that these two products are not of the same field or art. Rather, Applicants submit that one of ordinary skill in the art of making one would not necessarily be one of ordinary skill in the art of making the other.

Additionally, the Office Action does not provide a reason why one of ordinary skill in the art would have been motivated to combine a measuring capillary for measuring viscosity (*van Breest Smallenburg*) with a preconcentrator tube (*Vogel/Fite*). Rather, Applicants submit that these two fields are unrelated and only through impermissible hindsight would such a combination have been found.

Additionally, concerning the combination of *Vogel/Fite/van Breest Smallenburg* with *Adachi*, Applicants submit that again, one of ordinary skill in the art would not have looked to photoelectrolyzers for sunlight collection to modify a

method of forming a preconcentrator tube, let alone a measuring capillary for measuring viscosity allegedly combined with a preconcentrator tube formed as discussed in *van Breest Smallenburg*. While forming photoelectrolyzers using the methods of *Adachi* might be obvious to do with the use of *Adachi*'s disclosure generally, one of ordinary skill in the art would not look to applying such methods to forming a preconcentrator tube.

Additionally, the Office Action states that "choosing a specific method would be a mere design choice." See page 5. However, the Office Action fails to present a single method of forming a thin resistive film inside a fluid passage is formed such that the film lines the passage, as recited in claims 26, 45, and 49. Rather, the Office Action cites to forming photoelectrolyzers in *Adachi* and depositing an ITO film, which when deposited, forms a resistive film in *Vogel*. However, there is no mention as to adapting the coatings of *Adachi* to coat inside a fluid passage, nor is there mention as to whether the film in *Vogel* is in fact a thin film or how it is formed.

The claims in question are each method claims with specifically claim features with the benefits discussed in the specification. For example, "[b]y depositing the thin film heater within a fully enclosed fluid passage, the manufacturing steps and/or costs can be reduced and the heater can be provided over a maximum surface area of the fluid passage which preferably is of capillary size and/or over complex fluid passage geometries." See paragraph [0017]. Thus, the claimed methods are more than merely a "design choice."

For at least the reasons set forth above, Applicants respectfully submit that claims 26, 45 and 49 are allowable. Claims 27-31, 40, 42 and 44 depend from claim 26, claim 46 depend from claim 45 and claim 52 depends from claim 49, and are

allowable for at least the same reasons as claims 26, 45, and 49, respectively.

Withdrawal of the rejection is respectfully requested.

**2. Election Requirement**

Applicants submit that at least claims 26, 45 and 49 are generic to the alleged "non-elected species" and therefore requests rejoinder of claims 38, 39, 41, 47, 50 and 51 upon allowance of claims 26, 45 and 49. Applicants submit that all of the features of claims 26, 45 and 49 are required by claims 38, 39, 41, 47, 50 and 51 because claims 38, 39, 41, 47, 50 and 51 depend therefrom.

Additionally, because the Office Action characterizes claim features as "choosing a specific method would be a mere design choice", then grant of Applicants request for rejoinder is warranted. Withdrawal of the election requirement is hereby requested.

**3. Conclusion**

Applicants invite the Examiner to contact Applicants' representative at the telephone number listed below if any issues remain in this matter, or if a discussion regarding any portion of the application is desired by the Examiner.

In the event that this paper is not timely filed within the currently set shortened statutory period, Applicants respectfully petition for an appropriate extension of time. The fees for such extension of time may be charged to our Deposit Account No. 02-4800.

In the event that any additional fees are due with this paper, please charge  
our Deposit Account No. 02-4800.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: 10/20/06

By: 

Laura L. Lee  
Registration No. 48752

P.O. Box 1404  
Alexandria, VA 22313-1404  
703 836 6620